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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/972,955	10/10/2001	Ko Kanaya	401407	4811

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EXAMINER

JONES, STEPHEN E

ART UNIT PAPER NUMBER

2817

DATE MAILED: 07/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/972,955	Applicant(s) KANAYA ET AL.	
	Examiner Stephen E. Jones	Art Unit 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4 is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

The election/restriction is deemed moot since all of the non-elected claims have been canceled.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by Saitou of record.

As stated in the previous rejection, Saitou (Figs. 17-18) teaches a microwave (i.e. high frequency) circuit including: the device/circuit is on a substrate (i.e. the device is an integrated circuit); a transistor (10) (i.e. an active element), an output line (20) and a first pad can be arbitrarily designated the main circuit (i.e. such a designation is arbitrarily based upon one's perspective); a circuit block can be arbitrarily labeled as the capacitor (22) (i.e. a passive element) connected to the wide electrode that is parallel to the main line, and the other end of the capacitor (22) is connected to ground (the wide electrode

portion connects the capacitor 22 to the second pad) (i.e. the circuit block comprises the wide electrode, capacitor 22, and ground); a second pad formed by the electrode portion that is perpendicular to the output line connects to the first pad through a wire (L) (Claim 1); an input terminal is at the gate of the transistor and the transistor and first pad are between the input terminal and the output terminal (i.e. the end of the output line). Also, note that it is inherent that the impedance of a capacitor decreases with the increase of the input frequency since impedance of a capacitor is related to the inverse of frequency (Claim 3).

Note that the new limitations of switching between respective electrical characteristics and selectively connecting and disconnecting with a wire are not given patentable weight since these are functional limitations without any structural means for performing the function (i.e. the moving of the wire to connect or disconnect is an alteration changing the final product that does not have a structural means for the adjustment). Also, the limitation of preventing transmission leakage of the input signal (Claim 3) inherently is met by Saitou since the Saitou structure is the same as the presently claimed final product structure.

3. Claim 2 is rejected under 35 U.S.C. 102(b) as being anticipated by Noguchi et al.

Noguchi (Figs. 4a and 4b) teaches a microwave semiconductor integrated circuit including: a main circuit including a transistor (101) having an input and output (105, 105') and a first pad where the transistor and an inductor (L2) meet; a passive element capacitor (C0) and a line (Z0, i.e. an interconnect since it connects the capacitor to the pad) can be considered a circuit block; the first pad and transistor are between the input

and output; the capacitor (C0) is connected to the line (Z0) at a portion of the line which can be considered a pad since the capacitor is on the portion of the line (e.g. see Fig. 4a); and the interconnect line (Z0) is $\frac{1}{4}$ wavelength (e.g. see Col. 10, lines 1-3).

Also, note that the limitations of switching between respective electrical characteristics and selectively connecting and disconnecting with a wire are not given patentable weight since these are functional limitations without any structural means for performing the function (i.e. the moving of the wire to connect or disconnect is an alteration changing the final product that does not have a structural means for the adjustment). Thus the final product resulting from present claim 2 only requires an interconnect to be a quarter wavelength when the wire is disconnected (i.e. when the wire is disconnected the wire length is effectively zero and is not part of the final product) such as taught by Noguchi.

Response to Arguments

4. Applicant's arguments filed 5/12/04 have been fully considered but they are not persuasive.

Applicant argues that Saitou does not teach switching between various input characteristics by connection or disconnection of a wire.

Applicant's argument is not convincing since switching between respective electrical characteristics and selectively connecting and disconnecting with a wire are not given patentable weight since these are functional limitations without any structural means for performing the function (i.e. the moving of the wire to connect or disconnect

is an alteration changing the final product that does not have a structural means for the adjustment).

Furthermore, Applicant's arguments with respect to claim 2 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

5. Claim 4 remains allowed.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen E. Jones whose telephone number is 571-272-

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1762. The examiner can normally be reached on Monday through Friday from 8 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Stephen Jones
Patent Examiner
Art Unit 2817

SEJ